

Date: Sun, 23 Jan 94 11:09:24 PST
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V94 #67
To: Info-Hams

Info-Hams Digest Sun, 23 Jan 94 Volume 94 : Issue 67

Today's Topics:

 ARLX003 Girl Scout Thinking Day
 Converter?
 CTCSS encode/decode
 CW filters and DSP-9
 Daily Summary of Solar Geophysical Activity for 18 January
 Expanded receive mod for Yaesu FT-41R
 Old receivers
 Propagation Programs
 Ramsey FX Transceivers
 US License Examination Opportunities Scheduled 1/18/94 to 5/02/94
 What could this mean? (2 msgs)

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Tue, 18 Jan 1994 08:22:28 -0700
From: swrinde!cs.utexas.edu!math.ohio-state.edu!cyber2.cyberstore.ca!
nntp.cs.ubc.ca!alberta!nebulus!ve6mgs!usenet@network.ucsd.edu
Subject: ARLX003 Girl Scout Thinking Day
To: info-hams@ucsd.edu

SB SPCL @ ARL \$ARLX003
ARLX003 Girl Scout Thinking Day

ZCZC AX35
QST de W1AW
Special Bulletin 3 ARLX003

Date: Sun, 23 Jan 94 01:39:00 +0200
From: sdd.hp.com!sgiblab!swrinde!cs.utexas.edu!howland.reston.ans.net!pipex!sunic!
EU.net!news.eunet.fi!mpoli!matti.nieminen@network.ucsd.edu
Subject: Converter?
To: info-hams@ucsd.edu

Would it be possible to build a _simple_ converter, located between antenna and receiver, which would convert incoming FM (with 18-20kHz deviation) to WFM (75kHz deviation)? It should cover frequencies from 137 to 138MHz. It's just that the signals from the NOAA satellites are so weak that I can't get any useful pictures with signals received in WFM mode. (to me the sound isn't that noisy, go and figure)

Date: 20 Jan 1994 01:23:11 GMT
From: swrinde!cs.utexas.edu!howland.reston.ans.net!europa.eng.gtefsd.com!
MathWorks.Com!bigboote.WPI.EDU!bigwpi.WPI.EDU!bhiller@network.ucsd.edu
Subject: CTCSS encode/decode
To: info-hams@ucsd.edu

I'm looking for ICs or suggestions on how to generate and decode subaudible tones (CTCSS) for amateur radio. Any help would be appreciated. It is part of my senior project which involves building a computer controlled 2M transceiver. Thanks.

Brent
bhiller@wpi.wpi.edu

Date: 21 Jan 1994 16:01:22 -0800
From: library.ucla.edu!csulb.edu!paris.ics.uci.edu!not-for-mail@network.ucsd.edu
Subject: CW filters and DSP-9
To: info-hams@ucsd.edu

In <YEE.94Jan21183427@mipgsun.mipg.upenn.edu> yee@mipg.upenn.edu (Conway Yee) writes:

>I am asking about the difference in CW performance. Is a narrower
>filter easier to copy or a wider one?

This is a matter of personal taste for many of us. I really prefer the

narrower, my favorite filter is the Kenwood 270 Hz filter in the TS 430. The 500 Hz filter is fine, though, especially with IF shift or PBT (though there is a difference in PBT and IF shift that seems to make PBT much preferable :-). The filter can do two things for you :

1. Eliminate QRM nearby
2. Quiet down the background noise.

Reference number 2, some filters don't do so well at this, and some narrow filters have a "ring", or hollow sound to them. Many don't like this at all. Most IF filters don't have much ring, though some, many audio filters (except DSP I understand) can ring pretty badly.

My two cents.

Clark

.....

Clark Savage Turner, Graduate Student Researcher
Safety Critical Software Group home:
Department of Info. and Computer Science 1514 Verano Place
Irvine, CA. 92717 Irvine, CA. 92715
(714) 856 4049 (714) 856 2131

WA3JPG, QRP #3526, active on HF, VHF and UHF.
Admitted to practice law in California, Massachusetts, and New York.
ARRL Volunteer Counsel

Date: Tue, 18 Jan 1994 21:37:02 MST
From: swrinde!cs.utexas.edu!math.ohio-state.edu!cyber2.cyberstore.ca!
nnntp.cs.ubc.ca!alberta!nebulus!ve6mgs!usenet@network.ucsd.edu
Subject: Daily Summary of Solar Geophysical Activity for 18 January
To: info-hams@ucsd.edu

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DAILY SUMMARY OF SOLAR GEOPHYSICAL ACTIVITY

18 JANUARY, 1994

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(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACTIVITY INDICES FOR 18 JANUARY, 1994

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!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 018, 01/18/94
10.7 FLUX=100.7 90-AVG=102 SSN=043 BKI=3333 5522 BAI=021
BGND-XRAY=B2.2 FLU1=7.0E+06 FLU10=1.0E+04 PKI=3333 5533 PAI=022
BOU-DEV=033,031,027,024,084,109,017,017 DEV-AVG=042 NT SWF=00:000
XRAY-MAX= C2.8 @ 0423UT XRAY-MIN= B1.9 @ 1530UT XRAY-AVG= B4.4
NEUTN-MAX= +002% @ 1705UT NEUTN-MIN= -002% @ 1210UT NEUTN-AVG= -0.0%
PCA-MAX= +0.1DB @ 1815UT PCA-MIN= -0.2DB @ 0745UT PCA-AVG= +0.0DB
BOUTF-MAX=55351NT @ 0543UT BOUTF-MIN=55320NT @ 1706UT BOUTF-AVG=55339NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+067,+000,+000
GOES6-MAX=P:+121NT@ 2028UT GOES6-MIN=N:-064NT@ 0808UT G6-AVG=+090,+029,-030
FLUXFCST=STD:105,107,110;SESC:105,107,110 BAI/PAI-FCST=015,010,015/020,015,015
KFCST=3345 4322 2343 3332 27DAY-AP=010,010 27DAY-KP=2124 3222 2313 3223
WARNINGS=*SWF;*MAJFLR;
ALERTS=
!!END-DATA!!

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NOTE: The Effective Sunspot Number for 17 JAN 94 is not available.
The Full Kp Indices for 17 JAN 94 are: 4o 5- 4- 4- 2- 3o 3o 3+

SYNOPSIS OF ACTIVITY

Solar activity was low. Region 7654 (N08E46) remains the most active region on the disk. Five optically uncorrelated C-class flares were observed this period, most likely originating from this region. Magnetic inversion line analysis indicates 7654 has developed a beta-gamma-delta configuration while maintaining its overall size and shape. Region 7656 (S22W08) was numbered this period as an AXX spot group. All other regions quiet and stable.

Solar activity forecast: solar activity is expected to be low. Region 7654 is forecast to continue producing C-class, and possibly M-class activity.

STD: The National Solar Observatory has confirmed that Region 7654 is associated with extremely intense Ca XV emissions. Intense emissions were observed on 16 and 17 January. These emissions reduced to moderate levels today. The group has been relatively quiet over the last 24 hours, but remains capable of producing potentially strong activity.

The geomagnetic field has been at mostly unsettled levels with some minor storming experienced from 18/14Z-17Z at middle latitudes. Levels have been quiet to unsettled

since. High latitudes were at mostly unsettled to active levels with some major to severe storm levels recorded from 18/14Z-17Z. Levels have calmed down to mostly unsettled to active since.

Geophysical activity forecast: the geomagnetic field is expected to be mostly unsettled at middle latitudes with unsettled to active levels expected at higher latitudes.

Event probabilities 19 jan-21 jan

Class M	40/40/40
Class X	05/05/05
Proton	01/01/01
PCAF	Green

Geomagnetic activity probabilities 19 jan-21 jan

A. Middle Latitudes	
Active	25/20/25
Minor Storm	05/01/05
Major-Severe Storm	01/01/01
B. High Latitudes	
Active	35/25/30
Minor Storm	15/10/10
Major-Severe Storm	05/01/05

HF propagation conditions were again near-normal over the low and middle latitudes today, and below-normal to near-normal over the high and polar latitudes. High and polar latitude paths (particularly night-sector transauroral circuits) observed additional periods of minor signal degradation. No changes are expected. Middle and low latitude paths should continue to see near-normal propagation, while high and polar latitude paths are expected to see periods of minor signal degradation during night-sector signal transits. There remains a moderate risk for potentially strong SWF activity on daylight circuits.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS

REGIONS WITH SUNSPOTS. LOCATIONS VALID AT 18/2400Z JANUARY

NMBR	LOCATION	LO	AREA	Z	LL	NN	MAG	TYPE
7652	N04E30	220	0110	HSX	02	001	ALPHA	

7654 N08E44 206 0580 DKC 07 011 BETA-GAMMA-DELTA
 7656 S22W10 260 0000 AXX 00 001 ALPHA
 7655 S07W50 300 PLAGE
 REGIONS DUE TO RETURN 19 JANUARY TO 21 JANUARY
 NMBR LAT LO
 NONE

LISTING OF SOLAR ENERGETIC EVENTS FOR 18 JANUARY, 1994

A. ENERGETIC EVENTS:

BEGIN	MAX	END	RGN	LOC	XRAY	OP	245MHZ	10CM	SWEEP
1810	1810	1810					120		
2201	2201	2202					190		
2314	2315	2315					130		

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 18 JANUARY, 1994

BEGIN	MAX	END	LOCATION	TYPE	SIZE	DUR	II	IV
18/ 0044	0124	0208		LDE	C1.7	84		

INFERRED CORONAL HOLES. LOCATIONS VALID AT 18/2400Z

ISOLATED HOLES AND POLAR EXTENSIONS

	EAST	SOUTH	WEST	NORTH	CAR	TYPE	POL	AREA	OBSN
57	N23E11	N05E03	N10W02	N23E11	254	ISO	NEG	002	10830A
58	N36E88	S11E73	N00E64	N36E88	186	ISO	POS	012	10830A

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date	Begin	Max	End	Xray	Op	Region	Locn	2695 MHz	8800 MHz	15.4 GHz
17 Jan:	0033	0039	0045	C1.1						
	0204	0207	0209	B5.5						
	0221	0224	0228	B6.2						
	0242	0247	0250	B7.7						
	0603	0608	0612	C1.6						
	0718	0724	0745	B7.8					32	40
	0910	0919	0925	C9.3	1N	7654	N06E65	40	36	110
	1301	1309	1319	C2.3	SF	7654	N08E68			
	1351	1353	1405		SF	7654	N07E62			
	1857	1901	1905	C1.5	SF	7654	N09E58	28	57	68
	2116	2117	2129		SF	7654	N05E58			
	2347	2357	0003	C3.7						

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

	C	M	X	S	1	2	3	4	Total	(%)
	--	--	--	--	--	--	--	--	---	-----
Region 7654:	3	0	0	4	1	0	0	0	005	(41.7)
Uncorrelated:	3	0	0	0	0	0	0	0	007	(58.3)

Total Events: 012 optical and x-ray.

EVENTS WITH SWEEPS AND/OR OPTICAL PHENOMENA FOR THE LAST UTC DAY

Date	Begin	Max	End	Xray	Op	Region	Locn	Sweeps/Optical Observations
-----	-----	-----	-----	-----	--	-----	-----	-----
17 Jan:	0718	0724	0745	B7.8				III
	1857	1901	1905	C1.5	SF	7654	N09E58	V

NOTES:

All times are in Universal Time (UT). Characters preceding begin, max, and end times are defined as: B = Before, U = Uncertain, A = After. All times associated with x-ray flares (ex. flares which produce associated x-ray bursts) refer to the begin, max, and end times of the x-rays. Flares which are not associated with x-ray signatures use the optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II	= Type II Sweep Frequency Event
III	= Type III Sweep
IV	= Type IV Sweep
V	= Type V Sweep
Continuum	= Continuum Radio Event
Loop	= Loop Prominence System,
Spray	= Limb Spray,
Surge	= Bright Limb Surge,
EPL	= Eruptive Prominence on the Limb.

** End of Daily Report **

Date: 19 Jan 1994 19:27:47 -0500

From: swrinda!cs.utexas.edu!howland.reston.ans.net!newsserver.jvnc.net!

newsserver.usl.com!netnews.usl.com!not-for-mail@network.ucsd.edu
Subject: Expanded receive mod for Yaesu FT-41R
To: info-hams@ucsd.edu

I and a friend each just got a Yaesu FT-41R HT.

I called Yaesu and asked for any available mods. They have an expanded Rx/Tx mod which they won't give out without proof of MARS/CAP authorization. They did tell me about a keypad mod for getting just the expanded receive. You just hold down both the up and down arrow keys while powering the unit on.

Now it accepts frequencies from 420-470 MHz instead of its normal limits of 430-450. It still only transmits on 430-450. It also now requires the 100MHz digit to be entered when a frequency is directly entered. I don't know why this is since it doesn't seem to accept any frequencies that don't start with "4". Does anyone have any explanation for this?

Does anyone know of any other mods for the FT-41R? I heard that some Yaesu 70cm HTs can pick up the 800MHz range; can the FT-41R be modified to do this?

Thanks,
"Designed specifically to -=] Ford [=-
dissolve scum on contact" (Mike Ditto)

Date: 20 Jan 94 02:23:56 GMT
From: swrinde!sgiblab!news.cs.indiana.edu!bsu-cs!gdlee@network.ucsd.edu
Subject: Old receivers
To: info-hams@ucsd.edu

I am looking for old working communications receivers. I am a shortwave listener and am thinking about going back into ham radio and getting my tech. I would like to buy or maybe trade I have a little stuff for old working general coverage receivers. The wider the coverage the better. Age is no object as long as it works. If you want to clean out your garage basement, or attic let me know. Thanks.

Gary Lee

Date: Fri, 21 Jan 1994 16:47:32 GMT
From: rd1.InterLan.COM!sun1.interlan.com!tavernin@uunet.uu.net
Subject: Propagation Programs
To: info-hams@ucsd.edu

Does anybody have any recommendations for any propagation prediction programs that are available!?

I'd appreciate any info on any freeware, shareware, or commercial propagation software that is available ...

Thanks,

Victor Tavernini
Racal-Datacom, Inc.

tavernin@sun1.interlan.com

Date: 17 Jan 94 06:52:43 GMT
From: olivea!gossip.pyramid.com!pyramid!unify!csusac!citrus!beagle!
chandler@uunet.uu.net
Subject: Ramsey FX Transceivers
To: info-hams@ucsd.edu

howi@world.std.com (howie cahn) writes:

> rich@mulvey.com writes:
>
> >..... Personally, I got an astounding deal with
> >the Norcal 40 QRP xcvr kit that I assembled a few months ago. High
> >performance, easy assembly, looks great on a spectrum analyzer, and good
> >support from the distributor. And it cost me exactly \$5.00 more than
> >I would have paid for the crappy Ramsey transmitter/receiver pair.
>
> In fairness, you can't compare the prices of Ramsey and Norcal. One's a
> business and the other's a non-profit club with volunteer labor.
>
> howie, wb2cpu

You're absolutely right howie.

One is well thought out and designed, and the kits are meticulously assembled to ensure the components are correct (NorCal). The other is quickly thrown together to make a profit (Ramsey). My hats off to N6KR (designer) and WA6GER (assembler). I can't wait for the new 5 band QRP rig that the Northern California QRP club is putting together.

Jim Chandler, N0VAH
infopro.com!beagle!chandler
citrus.sac.ca.us!beagle!chandler

Date: Tue, 18 Jan 1994 12:48:09 MST
From: swrinde!cs.utexas.edu!math.ohio-state.edu!cyber2.cyberstore.ca!
nnntp.cs.ubc.ca!alberta!nebulus!ve6mgs!usenet@network.ucsd.edu
Subject: US License Examination Opportunities Scheduled 1/18/94 to 5/02/94
To: info-hams@ucsd.edu

AMATEUR RADIO EXAMINATION OPPORTUNITIES

Special Note: Amateur Radio licenses usually arrive between 8 and 10 weeks after the test session. The FCC considers their processing time to be 90 days--from the date they receive the application. The FCC usually receives the application one to two weeks after the test session (once the VE Team and the coordinating VEC have completed their processing).

Note: Codeless Technician to Technician w/HF upgraders (who pass a Morse code test) will not receive a new license from the FCC. The existing Technician license plus the CSCE conveying the Morse code test credit is the only documentation issued for use of the additional HF privileges.

The following test session information is provided by the ARRL/VEC for the upcoming six to eight week period. For further information, please contact the test session CONTACT PERSON at the telephone number provided. If necessary, you may contact the ARRL/VEC at 203-666-1541 x282 for additional information. Electronic mail may be forwarded to the ARRL/VEC via USENET at "bjahnke@arrl.org" or via MCI Mail to MCI ID: 215-5052.

Although the test session information presented here does not indicate whether walk-ins are accepted or not, most test sessions do allow walk-ins. We encourage you, however, to always contact the CONTACT PERSON at the telephone number provided so that the VE Team is aware that you be attending the test session.

STILL NEED TO PREPARE FOR YOUR EXAM?

If you would like information on how to become licensed; or how to locate Amateur Radio clubs, instructors, licensing classes and/or Novice examiners in your area; please contact the ARRL Educational Activities Department (EAD) at 203-666-1541 x219. The EAD can also provide information on recommended study materials. Electronic mail may be forwarded to the ARRL EAD via USENET at "rwhite@arrl.org" or via MCI Mail to MCI ID: 215-5052.

EXAM LISTINGS - DEFINITION OF FIELDS

STATE

Test Date, VEC, City, , Contact Phone, Contact Person

The SECOND field in the following listing specifies the VEC which is coordinating this examination. This single-character designator denotes the VEC as defined below. An "A" (for example) indicates that this examination is coordinated by the ARRL/VEC.

For further information on any examinations listed, or if you do not find any examinations listed for your area, you may contact any of the coordinating VECs below.

A = ARRL/VEC, 225 Main St, Newington, CT 06111; (d) 203-666-1541
The 1994 test fee is \$5.75.

X = Anchorage ARC, 2628 Turnagain Parkway, Anchorage, AK 99517;
(d) 907-786-8121, (n) 907-243-2221 (or) 907-276-5121
(or) 907-274-5546

C = Central Alabama VEC, 1215 Dale Dr SE, Huntsville, AL 35801;
205-536-3904

N = Charlotte VEC, 227 Bennett Ln, Charlotte, NC 28213;
704-596-2168

D = Great Lakes ARC VEC Inc., PO Box 273, Glenview, IL 60025;
708-486-8019

E = Golden Empire ARS, PO Box 508, Chico, CA 95927; No phone.

G = Greater Los Angeles ARG, 9737 Noble Ave, Sepulveda, CA 91343;
818-892-2068, 805-822-1473.

J = Jefferson ARC, PO Box 24368, New Orleans, LA 70184-4368; No phone

K = Koolau ARC, 45-529 Nakuluai St, Kaneohe, HI 96744;
808-235-4132

L = Laurel ARC Inc., PO Box 3039, Laurel, MD 20709-0039;
(d) 301-572-5124, 301-317-7819, (n) 301-588-3924

M = The Milwaukee RAC Inc., 1737 N 116th St, Wauwatosa, WI 53226;
414-774-6999. Test fee for 1994 is \$5.00.

H = Mountain ARC, PO Box 10, Burlington, WV 26710; 304-289-3576,
301-724-0674

P = PHD ARA Inc., PO Box 11, Liberty, MO 64068; 816-781-7313

R = Sandarc-VEC, PO Box 2446, La Mesa, CA 91943-2446; 619-465-3926

S = Sunnyvale VEC ARC, PO Box 60307, Sunnyvale, CA 94088-0307;
408-255-9000

T = Triad Emergency ARC, 3504 Stonehurst Pl, High Point, NC 27265;
919-841-7576

W = Western Carolinas ARS VEC, 5833 Clinton Hwy - Suite 203,
Knoxville, TN 37912-2500; 615-688-7771.
The 1994 test fee is \$5.75.

5 = W5YI-VEC, PO Box 565101, Dallas, TX 75356-5101; 817-461-6443
The 1994 test fee is \$5.75.

EXAMINATION OPPORTUNITIES OUTSIDE THE UNITED STATES:

02/05/94,A,Australia,,089-531-305,Maury Hatfield

01/29/94,A,Japan,,098-897-7381,Alice Kottmyer

01/23/94,A,Papua New Guinea,,,Kyle Harris KE9TZ - POB 997 - PNG

01/28/94,A,Saudi Arabia,,966-3-878-501,David Hart

*EOF

Date: Wed, 19 Jan 1994 20:03:45 GMT

From: amd!amdahl!netcomsv!netcom.com!jfh@decwrl.dec.com

Subject: What could this mean?

To: info-hams@ucsd.edu

The following paragraph appeared in an article in today's San Francisco Chronicle about what local companies are doing to help prepare for the next earthquake:

Finally, in an attempt to encourage the use of amateur (Ham) radios, which are used by many relief agencies during an emergency, Pacific Bell has reduced the cost of operating a Ham radio to the basic service rate of \$8.35 a month. Ham radios are licensed through the phone company.

I called PacBel to ask about this. They didn't have any idea. They realize that they don't license amateur radios, and they also don't rent any kind of amateur equipment. I thought they might be referring to a special rate for phone patches, but they denied knowing anything about that either.

Any ideas? Do other phone companies do anything to encourage amateur radio?

--

Jack Hamilton POB 281107 SF CA 94128 USA
jfh@netcom.com kd6ttl@w6pw.#nocal.ca.us.na

Date: 20 Jan 1994 01:58:02 GMT
From: think.com!hsdndev!dartvax.dartmouth.edu!usenet@ames.arpa
Subject: What could this mean?
To: info-hams@ucsd.edu

In article <jfhCJw7qA.29r@netcom.com>
jfh@netcom.com (Jack Hamilton) writes:

> Any ideas?

Ignorance in the press. Pure and simple.

=====
Kenneth E. Harker N1PVB Dartmouth College Amateur Packet Radio
kenneth.e.harker@dartmouth.edu Hinman Box 1262 n1pvb@w1et.nh.usa.na
(603) 643-6549 Hanover, NH 03755 or n1pvb-5 on 144.99
=====

Date: (null)
From: (null)
SB SPCL ARL ARLX003
ARLX003 Girl Scout Thinking Day

THE GIRL SCOUT'S THINKING DAY IS FEBRUARY 22. GIRL SCOUTS AND GIRL GUIDES THE WORLD OVER USE THINKING DAY TO REFLECT ON INTERNATIONAL FRIENDSHIP AND WORLD PEACE. WHY NOT CONTACT YOUR LOCAL GIRL SCOUT COUNCIL AND INVITE TROOP LEADERS TO BRING THE GIRLS TO YOUR STATION FOR A FEW QSOS? CONTACT ARRL FOR OUR FREE BROCHURES ABOUT GIRL SCOUTS AND HAM RADIO TO SEND HOME WITH THE YOUNG LADIES.

NNNN

/EX

End of Info-Hams Digest V94 #67
